Allotment Assessment and Evaluation Report for
New Mexico Standards and Guidelines for Public Land Health
Sagebrush Islands (#936) – June 18, 2010

<table>
<tr><td>Permittee</td><td></td><td colspan="3">Authorization Number
3001226</td></tr>
<tr><td>Livestock Use</td><td>Preference
AUMs</td><td>Allotment
00936</td><td>Active
12</td><td>Suspended
0</td></tr>
<tr><td></td><td>Period of Use /
Kind of livestock</td><td>Allotment
Sagebrush Islands</td><td>Number / Kind
1 Cattle</td><td>Season of Use
03/01 – 02/28</td></tr>
<tr><td></td><td>Percent Public Land</td><td colspan="3">AUMs are authorized at 100% public land</td></tr>
<tr><td>Allotment Profile</td><td>Physical Description</td><td colspan="3">Allotment 936 is located approximately 7 miles west of Cebolla, in Rio Arriba County, New Mexico. Elevation on this allotment is roughly between 7,100 and 7,500 feet. Landforms on the allotment include; uplands, arroyos and hills.

Two soil types are identified within the BLM lands in this allotment;

Berryman-Ruson association, 1 to 8 percent slopes. The soil consists of silt loams, with rooting depths over 60 inches. Parent materials of alluvium derived from limestone and shale comprise this soil. Hazards for erosion are moderate. Average annual precipitation ranges between 14 and 16 inches. Vegetation is characterized by western wheat, squirreltail, blue grama, alkali sacaton and sagebrush.

Calendar gravelly loam, 5 to 35 percent slopes. The soil consists of loams, with rooting depths around 40 inches. Parent materials of alluvium from shale comprise this soil. Average annual precipitation ranges between 14 and 17 inches. Hazards for erosion are moderate. Vegetation is characterized by pinyon, juniper, oak, june grass, muttongrass and sagebrush.</td></tr>
<tr><td></td><td>Land Status
Acreage</td><td>BLM
80</td><td>State
0</td><td>Private
0</td></tr>
<tr><td></td><td>Management Objectives</td><td colspan="3">The allotment is under a ‘Custodial’ (‘C’) management category. ‘C’ category allotments have evidence of a “not apparent” to “upward” long term trend, have no significant resource conflicts and have a low potential for improvement in vegetative production.</td></tr>
<tr><td></td><td>Key Forage Species</td><td colspan="3">blue grama, western wheatgrass, squirreltail, junegrass</td></tr>
<tr><td></td><td>Grazing System</td><td colspan="3">Rotational</td></tr>
<tr><td>Current Conditions / Management</td><td>Actual Use</td><td colspan="3">AUMs Year
12 2010
12 2009
12 2008
12 2007
12 2006</td></tr>
</table>

		12 2005 12 2004 12 2003 12 2002 12 2001
	Utilization	Due to the lack of staff utilization studies have not been conducted. During the assessment visit it was determined that the allotment was receiving slight to moderate amounts of utilization.
	Climate	The past water year (Oct. 1, 2009 – Sept. 30, 2010) the average temperature has been near average (0 to 1 degrees Fahrenheit above average) and precipitation has been slightly above average (0 to 3 inches). The winter was wetter (1.5 – 3 inches above normal) and was cooler (2 - 3 degrees Fahrenheit below average). The spring was drier, but cooler (0.75 – 1.5 inches below normal and 0 - 1 degrees Fahrenheit below average, respectively) This should provide for near normal plant growth for cool season plants. The summer was wetter (0 - 1.5 inches above normal) and warmer (2 - 3 degrees above normal) which should provide near normal growth for warm season plants. Global climate change resulting from increasing atmospheric CO_2 levels may accelerate rates of plant extinction and result in shifts in ecosystem structure (species diversity) and function. We anticipate that our monitoring efforts will track vegetation shifts allowing for management modifications to address local range impacts resulting from global climate change.
	Trend	No long term trend plots had been established. During the evaluation process a plot was established. Full findings are located in the Taos Field Office in the allotment file, but are summarized below.

Plot 1 **2010**

Soil Surface	Ground Cover (%)
Bare Ground	47
cryptogams	1
gravel	6
rock	1
litter	32
BOGR – blue grama	11
ARTR – sagebrush	1
HYRI - pingue	1

Species Composition	Composition (%)
ARTR – sagebrush	27
ELEL - squirreltail	6
PSSM – western wheatgrass	1
GUSA - snakeweed	4
HENE – New Mexico Feathergrass	5
HECO – needle and thread	1

<table>
<tr><td></td><td></td><td></td><td>BOGR – blue grama</td><td>38</td></tr>
<tr><td></td><td></td><td></td><td>Unknown daisy</td><td>3</td></tr>
<tr><td></td><td></td><td></td><td>CHMA – prostrate spurge</td><td>3</td></tr>
<tr><td></td><td></td><td></td><td>JUMO – juniper</td><td>9</td></tr>
<tr><td></td><td></td><td></td><td>PIED – piñon</td><td>1</td></tr>
<tr><td></td><td></td><td></td><td>PLJA - galleta</td><td>1</td></tr>
<tr><td></td><td></td><td></td><td>PSSM – western wheatgrass</td><td>1</td></tr>
<tr><td></td><td>Riparian</td><td colspan="3">There are no riparian areas within this allotment.</td></tr>
<tr><td></td><td>Wildlife</td><td colspan="3">Seasonal home ranges in the allotment include those for deer, elk, bear, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, and a variety of insects. The allotment is important winter range for both elk and deer.

Deer and elk are grazers; however there is little dietary overlap between deer and cattle. Best management practices would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.</td></tr>
<tr><td></td><td>Threatened and Endangered Species</td><td colspan="3">It is determined that there are no federally listed threatened or endangered species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment.

Special status species that are likely to be found on the allotment (seasonally) include bald eagle and ferruginous hawk.</td></tr>
<tr><td>Findings / Rationale for the New Mexico Standards for Public Land Health</td><td></td><td colspan="3">A Rangeland Health Evaluation Matrix was completed on June 18, 2010. This evaluation matrix is from Technical Reference 1734-6 “Interpreting Indicators of Rangeland Health.” The actual matrix forms are available within the allotment file. Below is a summation of the information gathered by the on site evaluation. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be 5(score)*10indicators=50/50*100 = 100% similarity, or what is expected based on an Ecological Site Description.

Soil and Site Stability
Three indicators were deemed None to Slight and seven were deemed Slight to Moderate.
Rating: 86%

Hydrologic Function
Two indicators were deemed None to Slight and eight were</td></tr>
</table>

		deemed Slight to Moderate. Rating: 84% Biotic Integrity Five indicators were deemed None to Slight and four were deemed Slight to Moderate. Rating: 91% Overall Rating: 87%
	Upland Standard	*Upland ecological sites are in productive and sustainable condition within the capability of the site. Upland soils are stabilized and exhibit infiltration and permeability rates that are appropriate for the soil type, climate, and landform. The kind, amount and/or pattern of vegetation provides protection on a given site to minimize erosion and assist in meeting State and Tribal water quality standards.* It was determined that this allotment is meeting the Upland Standard based on the above evaluation and information. Soils appear stable with erosion occurring as expected for the site.
	Biotic Communities Standard	*Ecological processes such as hydrologic cycle, nutrient cycle, and energy flow support productive and diverse native biotic communities, including special status , threatened, and endangered species appropriate to site and species.* It was determined that this allotment is meeting the Biotic Communities Standard based on the above evaluation and information. It appears that all ecological processes are functioning as expected for the site.
	Riparian Standard	*Riparian areas are in a productive, properly functioning and sustainable condition, within the capability of that site.* The Riparian Standard does not apply to this allotment, as no riparian areas are contained within the allotment.
	Conclusion	All Standards are being met or do not apply within this allotment, therefore no Determination Document is warranted. Continued monitoring will help establish future trend. It is recommended that grazing be renewed for another 10 years without any changes to permitted use on this allotment.

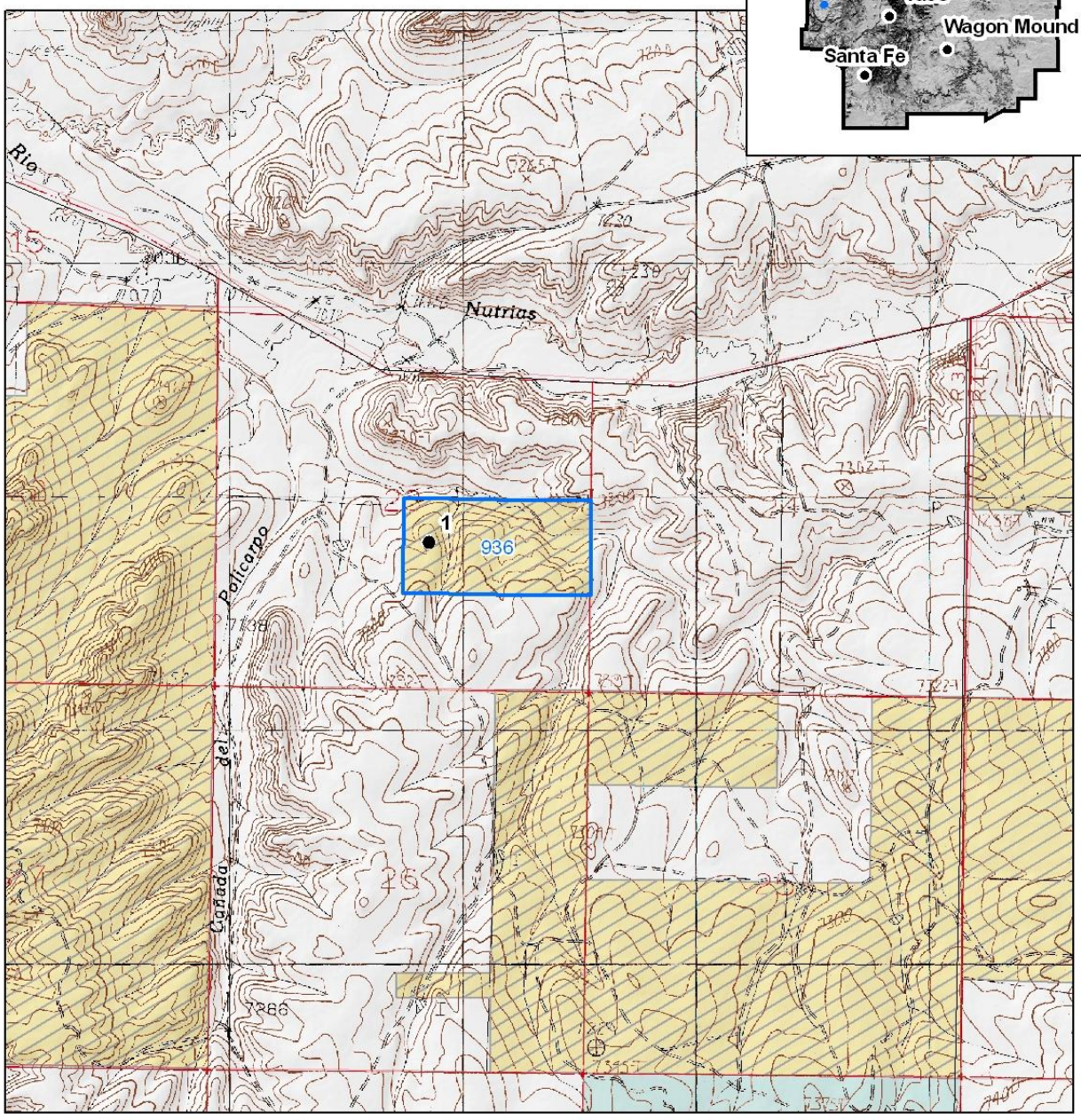
Consultation and Coordination

This Assessment and Evaluation Report has been sent or given to the affected permitee(s) / lessee(s), the interested publics and the following interdisciplinary team members for input and review:

Merril Dicks – Archeologist
Scott Draney – Department of Game and Fish
Greg Gustina – Fish Biologist
Pam Herrera-Olivas – Wildlife Biologist
Tami Torres – Outdoor Recreation Planner
Derek Trauntvein – Rangeland Management Specialist

Paul Williams – Archeologist
Valerie Williams – Wildlife Biologist

This document was prepared by: Jacob Young – Rangeland Management Specialist



Sagebrush Islands (936)

0 0.125 0.25 0.5 0.75 1 Miles

N W E S

Legend

- Monitoring Plots
- Allotment Boundary
- Bureau of Land Management
- State
- Private

7.5' Topos: Las Nutrias

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Tuesday, January 18, 2011